

What is claimed is:

1. A system for augmenting data from a source data file with data from a reference database to generate an augmented data file, comprising:

a reference database including at least one reference datum;

5 a handler component configured to retrieve a source data file including at least one structured datum;

a locator component configured to locate the structured datum in the source data file;

10 an analyzer component configured to associate the identified structured datum to the one reference datum to create an association according to an analyzing strategy; and

a generating component configured to:

generate a hyperlink based upon the association; and

15 embed the generated hyperlink in the source data file to create an augmented data file.

2. The system of Claim 1, wherein the source data file is stored at an address on a network.

3. The system of Claim 2, wherein the network is a public network.

4. The system of Claim 3, wherein the network is the Internet.

20 5. The system of Claim 1, wherein the structured datum includes a formatted webpage.

6. The system of Claim 1, wherein the reference datum includes a first uniform resource locator address.

25 7. The system as defined in Claim 7, wherein the first uniform resource locator address is the location of an advertisement.

8. The system of Claim 7, wherein the reference datum includes generating a second identifier associated with the first uniform resource locator address.

9. The system of Claim 8, wherein the analyzer component is further configured:

to generate a first identifier based upon the structured datum;  
to locate the second identifier corresponding to the first identifier; and  
to associate the first uniform resource locator address with the structured datum.

- 5           10. The system of Claim 9, wherein the first uniform resource locator address is further  
            associated with a user-friendly descriptor.
11. The system of Claim 9, wherein the first identifier is a first text string.
12. The system of Claim 11, wherein the first text string includes keywords.
13. The system of Claim 12, wherein the second identifier is a second text string.
- 10           14. The system of Claim 13, wherein the analyzer component is further configured to  
            locate the second text string according to the first text string.
15. The system of Claim 14, wherein the analyzer component is further configured to  
            associate the first uniform resource locator address with the first text string.
16. The system of Claim 9, wherein the analyzer component generates the first  
            identifier by means of a “fuzzy expert” search engine.
- 15           17. The system of Claim 16, wherein the analyzer component generates the first  
            identifier by means of a natural language search engine.
18. The system of Claim 17, wherein the hypertext link is further associated with a  
            user-friendly descriptor.
19. The system of Claim 1, wherein a publishing component is configured to save the  
20           augmented file at a desired second uniform resource locator address.
20. The system of Claim 1, wherein a browser is configured to display the augmented  
            data file when directed to the source data file.
21. A method of augmenting data from a source data file with data from a reference  
25           database, the method comprising:  
            retrieving at least one data file including at least one structured datum from a first  
            address;  
            identifying the structured datum;

5 locating reference datum from a reference database according to the identified  
structured datum;  
generating a hyperlink according to the reference datum;  
augmenting the data file with the hyperlink; and  
storing the augmented data file at a second address.

22. The method of Claim 21, wherein the first address is on a network.
23. The method of Claim 22, wherein the network includes at least a portion of the Internet.
- 10 24. The method of Claim 22, wherein retrieving one data file includes retrieving a web page.
25. The method of Claim 21, wherein locating reference datum includes locating a uniform resource locator address.
26. The method of Claim 25, wherein generating a hyperlink includes associating the structured datum to a uniform resource locator address.
- 15 27. The method of Claim 26, wherein generating a hyperlink includes generating a user-friendly description of the data contained at the uniform locator address.
28. The method of Claim 21, further comprising displaying the augmented data file.
29. The method of Claim 28, wherein displaying the augmented data file includes displaying the user-friendly name.
- 20 30. A method of augmenting structured data stored in a source data file with unstructured data stored in a reference database, comprising:  
reading a structured datum from a source data file;  
locating a reference datum in a reference database corresponding to the read structured datum;  
25 generating an association to the read structured datum based upon the located reference datum; and  
augmenting the source data file with the generated association.
31. The method of Claim 30, wherein the source data file is stored on a network.



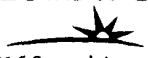
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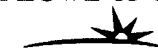
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32. The method of Claim 31, wherein the source data file is stored on the Internet.
33. The method of Claim 30, wherein locating the reference datum includes locating a uniform resource locator address.
- 5 34. The method of Claim 33, wherein locating the uniform resource locator address includes locating the uniform resource locator address for an advertisement.
35. The method of Claim 30, wherein locating a reference datum in a reference database corresponding to the read structured datum and wherein corresponding includes corresponding according to an analyzing strategy.
- 10 36. The method of Claim 35, wherein the analyzing strategy is locating a first text string in the structured datum and matching a second text string in the reference datum.
37. The method of Claim 35, wherein the analyzing strategy comprises locating a first keyword in the structured datum to correspond to a second key word in the reference datum.
- 15 38. The method of Claim 35, wherein the analyzing strategy includes generating a first identifier to the structured datum and locating a second identifier in the reference datum matching the first identifier.
39. The method of Claim 38, wherein the generating a first identifier is based upon a “fuzzy expert” search engine.
- 20 40. The method of Claim 39, wherein generating the first identifier further includes retrieving the natural language text from the structured datum.
41. A system for associating data in a reference database with structured data in a source data file, comprising:  
means for reading a structured datum from the source database;  
25 means for locating a reference datum in a reference database corresponding to the read structured datum;  
means for generating an association to the read structured datum based upon the located reference datum; and  
means for augmenting the source data file with the generated association.

42. The system of Claim 41, wherein the source data file is stored on a network.
43. The system of Claim 41, wherein the source data file is stored on the Internet.
44. The system of Claim 43, wherein locating the reference datum includes locating a uniform resource locator address.
- 5 45. The method of Claim 44, wherein locating the uniform resource locator address includes locating the uniform resource locator address for an advertisement.
46. The method of Claim 41, wherein locating a reference datum in a reference database corresponds to the read structured datum, and wherein corresponds includes corresponding according to an analyzing strategy.
- 10 47. The method of Claim 41, wherein the analyzing strategy includes locating a first text string in the structured datum and locating a second text string in the reference datum matching the first text string.
48. The method of Claim 41, wherein the analyzing strategy includes matching a first keyword in the structured datum to second key word in the reference datum.
- 15 49. The method of Claim 41, wherein the analyzing strategy includes generating a first identifier to the structured datum and matching a second identifier in the reference datum.
50. The method of Claim 49, wherein the generating a first identifier is based upon a “fuzzy expert” search engine.
- 20 51. The method of Claim 50, wherein generating the first identifier further includes retrieving the natural language text from the structured datum.
52. A computer software program stored on a readable medium, the computer software program comprising:  
means for reading a structured datum from the source database;  
25 means for locating a reference datum in a reference database corresponding to the structured datum;  
means for generating an association to the structured datum based upon the reference datum; and  
means for augmenting the source data file with the association.



53. The software program of Claim 52, wherein the source data file is stored on a network.
54. The software program of Claim 53, wherein the source data file is stored on the Internet.
- 5 55. The software program of Claim 53, wherein locating the reference datum includes locating a uniform resource locator address.
56. The software program of Claim 55, wherein locating the uniform resource locator address includes locating the uniform resource locator address for an advertisement.
- 10 57. The software program of Claim 52, wherein locating a reference datum in a reference database includes locating a reference datum corresponding to the read according to an analyzing strategy.
58. The software program of Claim 52, wherein the analyzing strategy is locating a first text string in the structured datum and matching a second text string in the reference datum.
- 15 59. The software program of Claim 52, wherein the analyzing strategy comprises matching a first keyword in the structured datum to second key word in the reference datum.
60. The software program of Claim 52, wherein the analyzing strategy is generating a first identifier to the structured datum and matching a second identifier in the reference datum.
- 20 61. The software program of Claim 60, wherein generating a first identifier is based upon a “fuzzy expert” search engine.
62. The software program of Claim 60, wherein generating the first identifier further includes retrieving the natural language text from the structured datum.
- 25 63. A computer software program stored on a readable medium for augmenting data from a source data file with data from a reference database to generate an augmented data file, comprising:  
a reference database including at least one reference datum;

a handler component configured to retrieve a source data file including at least one structured datum;

a locator component configured to locate the structured datum in the source data file;

5 an analyzer component configured to associate the identified structured datum to one reference datum to create an association; and

a generating component configured to:

generate a hyperlink based upon the association; and

embed the generated hyperlink in the source file to create an augmented

10 data file.

64. The software program of Claim 63, wherein the source data file is stored at an address on a network.

65. The software program of Claim 64, wherein the network is a public network.

66. The system of Claim 64, wherein the network is the Internet.

15 67. The system of Claim 64, wherein the structured datum includes a formatted webpage.

68. The system of Claim 63, wherein the reference datum includes a first uniform resource locator address.

20 69. The system as of Claim 68, wherein the first uniform resource locator address is the location of an advertisement.

70. The system of Claim 68, wherein the reference datum includes a second identifier associated with the first uniform resource locator address.

25 71. The system of Claim 68, wherein the analyzer component is further configured to:  
generate a first identifier based upon the structured datum;  
to locate the second identifier to corresponding to the first identifier; and  
to associate the first uniform resource locator address with the structured datum.

72. The system of Claim 70, wherein the first uniform resource locator address is further associated with a user-friendly descriptor.



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73. The system of Claim 71, wherein the first identifier is a first text string.
74. The system of Claim 73, wherein the first text string includes keywords.
75. The system of Claim 74, wherein the second identifier is a second text string.
- 5 76. The system of Claim 71, wherein corresponding includes corresponding based upon an analyzing strategy.
77. The system of Claim 76, wherein the analyzing strategy includes matching the first text string with the second text string and further associating the first uniform resource locator address with the first text string.
- 10 78. The system of Claim 77, wherein the analyzing strategy generates the first identifier by means of a “fuzzy expert” search engine.
79. The system of Claim 77, wherein the analyzing strategy generates the first identifier by means of a natural language search engine.
- 15 80. The system of Claim 70, wherein the hypertext link is associated with a user-friendly descriptor, the user-friendly descriptor being associated with the associated first uniform resource locator address.
81. The system of Claim 63, wherein a publishing component is configured to save the augmented file at a desired second uniform resource locator address.
79. The system of Claim 63, wherein a browser is configured display the augmented data file when directed to the source data file.